

## DISCLOSURE OF THE ABSTRACT

Disclosed is a synthesis method of cyclohexyl phenyl ketone with a high selectivity and a high yield from 1,3-butadiene and acrylic acid in the presence or absence of benzene or a non-aromatic organic solvent in the same reaction without a step of  
5 separating or purifying intermediates, the synthesis method including sequentially carrying out a [2+4] Diels-Alder reaction, a hydrogenation reaction, a chlorination reaction and a Friedel-Crafts reaction in the presence/absence of benzene or a non-aromatic organic solvent without separation of intermediates.